(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 7 October 2004 (07.10.2004)

PCT

(10) International Publication Number WO 2004/085325 A1

(51) International Patent Classification⁷: C03B 23/035, 35/24

(21) International Application Number:

PCT/EP2004/002979

(22) International Filing Date: 22 March 2004 (22.03.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

103 14 408.0 28 March 2003 (2)

28 March 2003 (28.03.2003) DE

(71) Applicant (for all designated States except US): PILK-INGTON AUTOMOTIVE DEUTSCHLAND GMBH [DE/DE]; Otto-Seeling-Str. 7, 58455 Witten (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): FUNK, Dieter

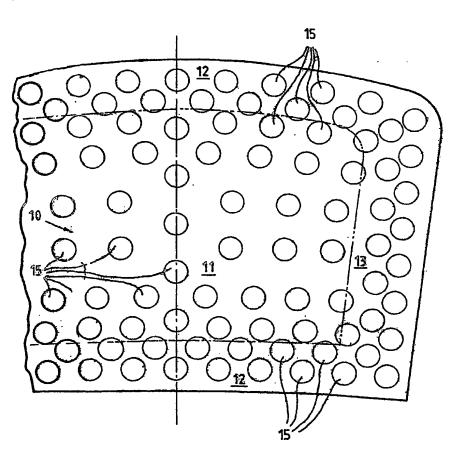
[DE/DE]; Schützenstrasse 16, 58452 Witten (DE). PILZ, Joachim [DE/DE]; Haardstrasse 63, 45739 Oer-Erkenschwick (DE). MICHELS, Peter [DE/DE]; Am Kindler 1, 45549 Sprockhövel (DE).

(74) Agents: HALLIWELL, Anthony, Charles et al.; Group Intellectual Property Department, Pilkington European Technical Centre, Pilkington plc, Hall Lane, Lathom, Ormskirk, Lancashire L40 5UF (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

[Continued on next page]

(54) Title: DEVICE FOR PRODUCING A GAS CUSHION



(57) Abstract: The gas cushion serves to support a preheated glass sheet and is produced by a chamber, which is connected to a source (21) of compressed gas. The upper wall (10) of the chamber is adapted to the shape of the glass sheet and has a plurality of apertures for the passage of gas in the form of nozzles (14), which comprise an entry bore (22) and, following thereupon, a progressively widening exit hole (16) with a nozzle exit area (15). The upper wall (10) of the chamber has a greater degree of perforation (sum of the nozzle exit areas (15) in relation to the total area of the respective zone) in its edge zone (12, 13) than in its central zone (11). The nozzles ensure that no jet marks can arise. The gas of the gas cushion can also flow out undisturbed at the side, so that no cooling edges are present and the occurrence of cooling shadows is accordingly avoided.